



Broadcast
Educational
Media
Commission

**Responses from Ohio Public TV stations
Not using Ohio's Joint Master Control
For October 6, 2022
Engineering & Broadcast Operations Committee
Meeting**

WVIZ (Cleveland)

WOUB (Athens)

WNEO (Toledo)

Think TV/WCET (Dayton)

Survey of Ohio Public TV Leaders Summer 2022

For Ohio Public TV Station

NOT USING Ohio's JMC for Master Control of its channels

WVIZ

1. Share why your station is NOT using the JMC?
 - a. There are three distinct reasons Ideastream Public Media made the ultimate decision to not use the JMC operated by BEMC:
 - b. The early deployment of the technology fell far below our expectations. There were technical anomalies that lasted for over nine months that caused severe disruption with our viewing audience, requiring us to staff complaint-response lines to address the flood of inquiries. The deployment of the technology, in our opinion, was fundamentally flawed because it was driven by the goal to bring as many channels up as fast as possible, as opposed to focusing on the effectiveness, accuracy and quality of service before each channel was brought onboard.
 - c. The workplace culture of BEMC is too distant and separated from the communities we serve and from our legal responsibilities to the FCC as the license holder. Unlike other JMC operations that service public media, Ideastream Public Media would have little to no control over a vital part of its operations and service. This concern was made clear during the rollout of the service. At a time when we needed clear solutions to the ongoing problems, they were not timely and in some cases, not provided. Again, it underscored a culture that wasn't accustomed to being responsive to audience needs and/or our legal requirements.
 - d. The limitations of the initial investment and the advancement of technology. Having been involved in the funding decisions by the Corporation for Public Broadcasting's investment in the NY and Florida JMC's, each of which total cost were in excess \$10M, it was no surprise that a \$3M solution would be limited compared to the NY and Florida operations. Also, it was anticipated that the advancements in technology would significantly change the economics and cost structure of operating station Master Controls. The cost benefit of outsourcing this function has decreased significantly, given other options and of course, automation.

2. In looking to evaluate the success of your station's Master Control, what are the benchmarks you use to track performance.
 - a. Consistency and quality of the broadcast
 - b. Response time to technical difficulties
 - c. Integration with organization's broadcast distribution plans, especially ATSC 3.0/NextGen
 - d. Workflows involving live productions
 - e. Ease of schedule manipulation and spontaneous changes
3. What would open the door to use Ohio's JMC?
 - a. The fundamental issues we had with the initial JMC launch still exists today, with the possible exception of operational accuracy. The current improvement of BEMC's operational proficiency, in our opinion, was due in part to the exodus of several stations from the service. One former GM who managed a station that is currently still using BEMC's JMC commented that the service and operations began to improve significantly after several stations exited. We do believe, however, there is a limited, but critical role for BEMC's JMC: operational redundancy and the distribution of The Ohio Channel. Redundancy is the lifeblood for every broadcast operation, and is a resource many stations cannot afford to adequately maintain. Also, as the administrator of The Ohio Channel, Ideastream Public Media relies heavily on BEMC's distribution of this vital service, not only to the communities we serve, but also to all Ohio public media stations.
4. What services are your station currently using from BEMC?
 - a. Master Control services for The Ohio Channel which is available to all OETS stations.
 - b. Interconnect service to Ideastream, which is a two-way feed between the Idea Center and BEMC - most commonly used to transmit the Sound of Ideas for inclusion on The Ohio Channel, and occasionally used to provide other streaming data.
 - c. In March 2022, the JMC provided emergency playout of on-demand programs to WVIZ due to a failure in our playout system. JMC has continued to be ready to provide this kind of backup capability for WVIZ playout; however, we haven't needed to use the backup service since March.
5. What are the limitations in using the JMC and what would it take for you to use all of Ohio's JMC services?
 - a. [See responses to #1 and #3]

WOUB

1. Share why your station is NOT using the JMC?
 - a. PRIMARY Going “all-in” and relying on a non-broadcast state agency to provide an essential operation that legally falls to licensed broadcasters is not a wise business decision. If at any point a director or political party in charge decides this is not a business they want to/or should be in, stations will either be required to expeditiously rebuild a local master control, or pony up the revenue required to keep a system operational. What if WOUB was “all-in” with ETECH? OET? I’m grateful we did not heavily rely on radio services from North Star as those are no longer available. The early deployment of the technology fell far below our expectations. There were technical anomalies that lasted for over nine months that caused severe disruption with our viewing audience, requiring us to staff complaint-response lines to address the flood of inquiries. The deployment of the technology, in our opinion, was fundamentally flawed because it was driven by the goal to bring as many channels up as fast as possible, as opposed to focusing on the effectiveness, accuracy and quality of service before each channel was brought onboard.
 - b. SECONDARY The initial on-boarding process after a year and a half could only be described as a poor quality of technical service.
 - c. FINALLY Once WOUB was able to replace failing encoders - and thanks to technology changes - double the amount of channels be transmitted from three to six, (April 2018) it was cost prohibitive to add additional content streams to the JMC to feed back to WOUB.
2. In looking to evaluate the success of your station’s Master Control, what are the benchmarks you use to track performance.
 - a. Are all seven (14) streams being broadcast with correct video/audio/captions? Is down time minimal? What causes any down time – weather – or technical? How quickly can it be restored? What is the cost to operate? Are we fulfilling our EAS commitments? How about the EPG? What is the ease of overall operation? What is the ease in getting into/out of local nightly news and live sports content? How far ahead can things be loaded and locked in? Are the bugs/ID/underwriting airing properly? Is JIP easy? How easy does the automation work with the file library (are the correct versions airing?) Is the viewing audience happy with the technical quality of what’s being presented to them?
3. What would open the door to use Ohio's JMC?
 - a. See question one.
4. What services are your station currently using from BEMC?
 - a. WOUB utilizes an OGT feed for both transmitters from 0100 – 1800 daily.
 - b. WOUB relies on satellite access from the JMC to circumvent local weather issues in the region and provides WOUB satellite access to the JMC to assist other regions in the state the same service (although WOUB cannot

receive WBGU's diversity feed, nor any passthroughs direct from station-to-station.)

- c. BEMC provides backhaul capability and rack space for WOUB to connect to AT&T fiber for the DirectTV/Dish Network -Columbus head ends.
 - d. WOUB acquires some APT programs from the JMC or uses the JMC to access content from other stations using an export folder. (State of Ohio, NewsDepth, etc.)
 - e. WOUB sends program files to BEMC to assist the JMC and other stations with any missing content.
 - f. The JMC provides EAS and OEAS alerting support.
5. What are the limitations in using the JMC and what would it take for you to use all of Ohio's JMC services?
- a. WOUB does not require "all" of the services from the JMC and has opted to utilize the services of the JMC in a manner that best serves the local audience.

WNEO

1. Share why your station is NOT using the JMC?
 - a. In my opinion, the BEMC JMC—and other centralized hubs/JMC's for that matter—are 20th Century solutions for a 20th Century problem when content distribution equipment was extensive and personnel/operating costs were extremely high.
 - b. To illustrate my point: In 1999, we spent over \$1 million to move our master control from our Salem transmitter site to our Kent administrative offices. At that time, we had 6 full-time employees dedicated to keeping our one channel running 24/365.
 - c. In 2019 we completely re-capitalized our master control for under \$200K and today we have 1 full-time employee who “mans” master control while he does other IT-related functions. This same employee can operate master control from his home using his iPad.
2. In looking to evaluate the success of your station's Master Control, what are the benchmarks you use to track performance?
 - a. Are we on the air? Are we on the air 99.999% of the time? If we go off the air, how long are we off? If a technician needs to address a problem in master control, how long does it take for that technician to get there? How well does master control fit into the entire program distribution chain? When we do live studio shows, does the workflows between production and master control ensure a seamless procedure? If we need to switch-out a program, what is the turn-around time? If we want to make a change to the schedule, how long is the turn-around time? In the event of a disaster or crisis, can the master control operation easily relocate to another site? Can the master control workflow be mapped out and easily taught to another operator? In normal operations, is the master control function “in the background” requiring little to no attention? If a particular system in master control goes down, is it relatively easy to by-pass the system to keep the station on the air while the problem is being resolved? Is the current master control configuration flexible and capable of expanding to include publishing on other platforms?
3. What would open the door to use Ohio's JMC?
 - a. We wanted to use Ohio's JMC as a redundant/back-up playout system for all of our channels but at the time, BEMC administration was not willing to invest time or money in developing a solution with Myers Information System. If BEMC administration would be willing to invest the time or money in creating a solution for the delivery of playlists, we would be open to Ohio's JMC being a redundant/back-up playout system for PBS Western Reserve.
4. What services are your station currently using from BEMC?
 - a. As a diversity site. The last mile connection to the ORNET point of presence. Pass through OGT.

5. What are the limitations in using the JMC and what would it take for you to use all of Ohio's JMC services?
 - a. Ohio's JMC services are not an operational "fit" for PBS Western Reserve (WNEO/WEAO).

ThinkTV/WCET

1. Share why your station is NOT using the JMC?
 - a. Technical & equipment incompatibilities. We use an animated 'bug' to identify our stations which BEMC cannot currently technically support. In addition, if we need to insert lower-third graphics (phone numbers during Auction or Pledge) or during live broadcasts and we currently have to take back control of our channels during these times.
 - b. Using BEMC currently is not an added efficiency. Our traffic department has to work farther ahead of schedule and immediate log changes are challenging. We program 13-channels and still employ MC operators and support MC equipment since we still utilize our own MC during pledge and to support our primary channels.
 - c. Having an outside JMC, solely funded by the State, control the last mile of our broadcast service could be a potential risk. We are also responsible for our FCC license and legal requirements for broadcast. If we invested all our services into a State run JMC, and funding was eliminated for that service due to a change in politics, it would leave us without distribution capabilities. The Ohio PBS stations carry different licensees and cannot be perceived as a State system.
 - d. With BEMC involved and close to our State funding priorities and decisions, there is a perceived perception of control which doesn't align well with our mission and responsibilities to our stakeholders.
 - e. With the advancements in technology, the original thoughts of cost-saving for Capital Equipment investments is not as valid as it was years ago.
2. In looking to evaluate the success of your station's Master Control, what are the benchmarks you use to track performance.
 - a. Quality on-air broadcast signal
 - b. Response time to technical difficulties
 - c. Planning and integration of future broadcast distribution options, especially ATSC 3.0/NextGen
 - d. Workflows involving live productions
 - e. Ease of schedule changes
3. What would open the door to use Ohio's JMC?
 - a. ThinkTV and CET do currently use the JMC for sub-channel distribution.
 - b. I would prefer to use BEMC as a secondary or redundant MC Service. It is vital for the distribution of The Ohio Channel which all 8 Ohio PBS stations carry.
 - c. Consideration of what 'other' services BEMC JMC can provide for the future. Are there additional roles that they can play to assist OETS? I would like to see stronger collaboration and avoid an 'all' or nothing mindset. For stations that use the JMC 100% we should support their

strategy and for others that may choose different options BEMC JMC should also be available as a service when needed.

4. What services are your station currently using from BEMC?
 - a. Sub-channels pass-through distribution
 - b. We consider BEMC a 'back-up' MC for our services.
 - c. The Ohio Channel service which is available to all OETS stations.
 - d. Interconnect service for uplinks and feeds.
 - e. Locating lost PBS content.
5. What are the limitations in using the JMC and what would it take for you to use all of Ohio's JMC services?
 - a. No response